

**METHOD AND APPARATUS TO MINIMIZE
CONGESTION IN A PACKET SWITCHED NETWORK**

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CROSS-REFERENCE TO RELATED APPLICATIONS

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The present application is related to Application Serial No. 09/189206,
filed November 10, 1998, entitled "Method and Apparatus for Interconnection of
Packet Switches with Guaranteed Bandwidth" and to Application Serial No. 09/189347,
filed November 10, 1998, entitled "Method and Apparatus to Reduce
Jitter in Packet Switched Network," both incorporated by reference herein.

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FIELD OF THE INVENTION

The present invention relates to communication networks, and particularly,
the present invention relates to providing guaranteed quality of service in a packet
switched network.

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BACKGROUND OF THE INVENTION

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In communications technology, there is an ever-increasing demand for high-
performance networks, and in particular, a demand for high-performance Internet
access. This increased demand has led to the development of improved networks
capable of handling larger volumes of data with smaller delays. Nonetheless, these
improved networks each have their own shortcomings.

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Communications networks like the Internet are generally formed with a
number of transmission links interconnected with switches. A transmission link is
any medium through which signals are communicated and can be single or multiple
twisted pairs, optical fiber, coaxial cable, radio links, or other mediums. A switch
is a device with one or more input ports and one or more output ports. The switch
directs bits arriving at an input port to the appropriate output port. Switching in
communications is accomplished using one of two methods: circuit switching and
packet switching.

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